

In re Patent Application of:
VINSON ET AL.
Serial No. 10/696,918
Filing Date: October 30, 2003

REMARKS

Claims 10, 12-18, 28, 30, and 38 remain in this application. Claims 1-9, 11, 19-27, 29, and 31-37 have been cancelled. Claims 10, 12, 28, 30, and 38 have been amended.

Applicants thank the Examiner for the detailed study of the application and prior art. At the outset, Applicants submit four new sheets of drawings showing FIGS. 2, 3, 4, and 4A as properly labeled "Replacement Sheets". FIG. 2 now shows that the semiconductor die 14 is indicated as positioned over a substrate 12. FIG. 3 has reference numeral 31 removed and the reference numeral 14 as the semiconductor die properly substituted. FIG. 4 has the added adhesive layer 16B and the reference numeral 31 removed. FIG. 4A has the added reference numeral 14 for the IC and the reference numeral 31 removed.

Paragraph 26 in the specification has been amended to remove the reference numeral 31 for the integrated circuit since the proper reference numeral is 14 for the semiconductor die which could be an integrated circuit.

Non-elected claims 32-37 have been cancelled.

Applicants also submit a Declaration Under 37 CFR §1.131 as signed by the inventors proving that the inventors had conceived of the subject matter of the above-identified patent application while working in their laboratories in the United States at Harris Corporation in Palm Bay, Florida prior to July 12, 2000, the effective date of U.S. Patent No. 6,429,536 to Liu et al (hereinafter "Liu"). It is clear that they conceived an integrated circuit chip module that would have improved decoupling capacitor characteristics with decreased equivalent series inductance and equivalent series resistance. They worked diligently from conception before

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July 12, 2000 to reduction to practice on August 22, 2000, of an integrated circuit chip module that includes a substrate and other details as set forth in paragraph 3 of the 131 Declaration.

As explained in paragraph 4, Exhibits 1 and 2 are photographs of the reduced to practice module. Exhibit 1 includes a top plan view and a side elevation view showing a decoupling capacitor assembly that includes the capacitor carrier, decoupling capacitor and wire bonds. Exhibit 2 is a side elevation view showing a capacitor, a metallized thin film as a metallized carrier, the carrier and die.

After reducing to practice the invention on August 22, 2000, the inventors worked to improve the invention and filed a patent application on the invention.

Not only is the Liu reference having the July 12, 2000 effective date removed, but also the 6,873,035 to Watanabe et al. reference filed on May 2, 2001 removed, (having a foreign application priority date of December 15, 2000).

As to the remaining reference, i.e., U.S. Patent No. 6,005,778 to Spielberger et al. (hereinafter "Spielberger"), Applicants have amended the independent claims to recite the now allowable subject matter concerning the plurality of decoupling capacitor assemblies mounted on the integrated circuit die as set forth in claim 11. The Examiner had objected to claim 11 because the plurality of decoupling capacitor assemblies are mounted on the substrate 12 and not on the integrated circuit die. As shown in FIG. 2 and in comparison with FIG. 1, the semiconductor die 14 are mounted on the substrate 12, and the decoupling capacitor assemblies

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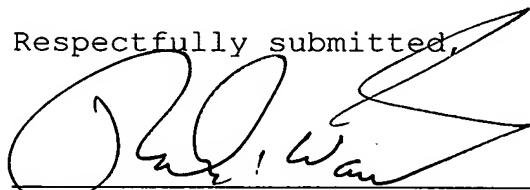
30 are mounted as a plurality of assemblies on each semiconductor die 14. The subject matter of claim 11 is allowable because Watanabe is removed as a reference.

As to claim 28, it has been amended to cite the allowable subject matter of claim 17 (Liu has been removed) regarding a wire bond extending from the decoupling capacitor and adapted to be connected to a logic pin of an integrated circuit die.

Independent claim 38 is amended to recite the plurality of decoupling capacitor assemblies mounted on each integrated circuit die (allowable subject matter of claim 11).

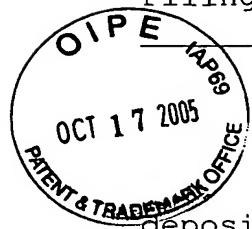
Applicants contend that the present case is in condition for allowance and respectfully requests that the Examiner issue a Notice of Allowance and Issue Fee Due. If the Examiner has any questions or suggestions for placing this case in condition for allowance, the undersigned attorney would appreciate a telephone call.

Respectfully submitted,



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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: **MAIL STOP AMENDMENT, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450**, on this 11th day of October, 2005.

Julie Lalan